

Date: Tue, 30 Nov 93 04:30:37 PST
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
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Subject: Ham-Space Digest V93 #95
To: Ham-Space

Ham-Space Digest Tue, 30 Nov 93 Volume 93 : Issue 95

Today's Topics:

Are non-metallic cross booms necessary?
HELP FOR UNDERGRADUATE PROJECT NEEDED (TA!)
MIR Packet frequencies?

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 29 Nov 1993 19:34:10 GMT
From: swrinde!elroy.jpl.nasa.gov!news.aero.org!aerospace.aero.org!
barger@network.ucsd.edu
Subject: Are non-metallic cross booms necessary?
To: ham-space@ucsd.edu

Conventional wisdom says that non-metallic (i.e., fiberglass or
similar) material must be used as a cross boom or mast when mounting
circularly polarized antennas since the presence of a metallic
material will distort the field around the antenna. There are
conflicting opinions, however. A similar concern involves routing the
feedline so that it doesn't exit the antenna at a position that will
disturb the field around the antenna.

Has anyone made any measurements or simulations/models that either
confirm or refute these assertions? Are the potential disturbances
large enough to make any noticable difference in performance? My
particular problem concerns the feedline. I would like to run the
feedline along the boom to the cross boom, across the cross boom to
the tower rather than have the feedline hang off the end of the

antenna and droop to the tower. The drooping feedline can potentially snag on the roof and (as my wife reminds me daily) is not particularly nice to look at.

73 Joe N6KK
barger@aero.org

Date: 29 Nov 93 14:20:28 GMT
From: haven.umd.edu!darwin.sura.net!howland.reston.ans.net!pipex!uknet!bhamcs!
bham!ibm3090.bham.ac.uk!JONESGX@ames.arpa
Subject: HELP FOR UNDERGRADUATE PROJECT NEEDED (TA!)
To: ham-space@ucsd.edu

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Hello, having a few problems (correction a LOT of problems) with an undergrad project involving radio astronomy.

This is the info we've been given.....

RADIO ASTRONOMY

We have manufactured two radio telescopes with 2.0m parabolic antennae. These are mounted on ALT-AZ computer controlled drive systems. A receiver working at 1420MHz has also been constructed using very low noise GAS Fet pre-amplifiers.

The project involves the calibration of the radio telescopes by observing bright sources such as the sun and attempting to operate the receiver as a two beam interferometer.

Any suggestions?????!!!!!!!

What we'd quite like to do is develop the reciever to look around the 21cm line of hydrogen, to make the reciever slightly adjustable around this line to look at redshift and blueshifts in the sky - especially in the milky way.

All help very much appreciated!!

Georgina Jones JONESGX@IBM3090.BHAM.AC.UK
Bruce Rimell RIMELLBD@IBM3090.BHAM.AC.UK

Date: 29 Nov 93 10:57:52 GMT

From: swrinde!sgiblab!munnnari.oz.au!metro!news.ci.com.au!eram!
dave@network.ucsd.edu
Subject: MIR Packet frequencies?
To: ham-space@ucsd.edu

In article <754480322.15snx@mu.apana.org.au>,
jmorris@mu.apana.org.au (James Morris) writes:

| >This usually happens Friday/Saturday nights when they have some spare time.
|
| Friday/Saturday nights.. in which time zone ?

(G'day James!)

Depending on the centricity of the author, it would be: a) USA, b) UTC.
Probably in that order...

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End of Ham-Space Digest V93 #95

